

$^{16}\text{O}({}^3\text{He},2\text{n})$  1967Es02

<u>Type</u>	<u>Author</u>	<u>Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	J. H. Kelley, G. C. Sheu	ENSDF	16-Jan-2018

1967Es02: Beam of 26 to 32 MeV  ${}^3\text{He}$  ions, from the Brookhaven 60 inch cyclotron, impinged on either a gaseous  $\text{O}_2$  or thin  $\text{Al}_2\text{O}_3$  target producing  $^{17}\text{Ne}$  residuals. An array of two Si detector telescopes were used to measure the energy spectrum of  $\beta$ -delayed particle emissions. Ten groups were observed in the energy spectrum. The target was irradiated for periods of 300 ms, while counting lasted for 500 ms. Analysis of the decay curve yielded  $T=105$  ms 5. A careful study of the excitation function for the reaction indicated  $Q=-22.42$  MeV 19 for the  $({}^3\text{He},2\text{n})$  reaction, which corresponds to  $\Delta M=14.52$  MeV 19 using the 1964 mass tables.

 $^{17}\text{Ne}$  Levels

<u>E(level)</u>	<u><math>T_{1/2}</math></u>
0	105 ms 5